

separate line **86b** being located behind the first separate line **86a**. From points **92a** to **92b** of cable **80**, the folded second separate line **86b** is located behind the first separate line **86a**.

Referring to FIGS. **6A**, **6B**, **6C** and **6D**, FIGS. **6A** through **6D** illustrate a way to wind the cable **80** along second shaft **68** and first shaft **60** including first shaft portions **64a** and **64b**, as well as illustrate a way to similarly wind the cable **80** along the fixing shaft **640a** and the rotation shaft **680** of FIG. **4B**. Referring to FIG. **6A**, the cable **80**, reduced the depth, passes along the second shaft **68**, and then is wound round the second shaft **68** as indicated by arrow **S** at the position in contact with the second shaft **68** and the swivel block **66**. That is to say, the first part **A** of cable **80** and the second part **B** of cable **80** are passed along the second shaft **68** and the third part **C** of cable **80** and the fourth part **D** of cable **80** are rotated about the second shaft **68** along the direction as shown in FIG. **6A** by the arrow **S** but the reverse direction is also possible. At this time, a gap exists between the second shaft **68** and the wound cable **80**, and then rotation of the second shaft **68** has no relation to the rotation of the wound cable **80**. Before a bent **88**, desirably being U-shaped, of the third part **C** reaches the vertical shaft **68** as shown in FIG. **6B**, the third part **C** of cable **80** is continuously wound. Bent **88** is positioned at a point where cable **80** changes a direction of orientation from the second shaft **68** to the first shaft **60**. Then the third part **C** is folded from a bending member **90** so that it is located or positioned behind and along the first horizontal shaft portion **64a** as shown in FIG. **6C** as viewed from a front direction relative to base **20** indicated by the arrow **U** in FIGS. **3** and **6C**. Finally, the fourth part **D** of cable **80** is rotated about the first horizontal shaft portion **64a** as shown in FIG. **6D** to connect to a system unit **100** located in the base **20** as indicated by the arrow **V** in FIG. **6D**. In this way, the cable **80** connected to the display screen **50** passes along the tilt/swivel hinge assembly or mechanism **25** and enters the base **20** of portable computer **10**. In case of rotation of the display cover **40**, the wound portion **E** (FIG. **6B**) of cable **80** is tight and in the reverse situation, the wound portion **E** (FIG. **6B**) is loose to turn in the original situation. If the third part **C** of the cable **80** were rotated about the reverse direction in a preferred embodiment, the wound portion **E** (FIG. **6B**) of cable **80** would be loose in the rotation of the display cover **40** and in the reverse situation, the wound portion **E** (FIG. **6B**) would be tight to turn in the original situation.

In accordance with a preferred embodiment of the present invention, the display cover **40**, incorporating the display screen **50**, is easily tilted and swivelled at any angle, and there is no need to turn the base **20** on working to show the display screen **50**. The present invention is especially advantageous in that a user of the portable computer **10** is free to input the data with a stylus because a position of the display screen **50** faced upside relative to base **20** as shown in FIG. **1D**, is possible in a preferred embodiment of the present invention.

While there have been illustrated and described what are considered to be preferred embodiments of the present invention, it will be understood by those skilled in the art that various changes and modifications may be made, and equivalents may be substituted for elements thereof without departing from the true scope of the present invention. In addition, many modifications may be made to adapt a particular situation to the teaching of the present invention without departing from the scope thereof. Therefore, it is intended that the present invention not be limited to the particular embodiments disclosed as the best mode contemplated for carrying out the present invention, but that the

present invention includes all embodiments falling within the scope of the appended claims.

What is claimed is:

1. A portable computer, comprising:

a base;

a cover incorporating a display screen;

a hinge assembly connecting said cover and said base, said hinge assembly including a first shaft horizontally oriented relative to said base and a second shaft oriented perpendicularly relative to said first shaft, said hinge assembly being rotatively movable about two axes of rotation to permit said cover to tilt about a first axis of rotation and to swivel about a second axis of rotation relative to said base; and

a cable connecting said cover and said base electrically arranged to pass along and be wound about said hinge assembly.

2. The portable computer of claim 1, further comprised of said hinge assembly comprising:

a pair of first blocks respectively located at opposing ends of said first shaft, said pair of first blocks coupling said first shaft to said base and permitting said cover to tilt about said first axis of rotation;

a second block connecting said first shaft and permitting said cover to swivel about said second axis of rotation; and

a support provided within said cover coupled to said second block by said second shaft to support said cover.

3. The portable computer of claim 2, further comprised of said portable computer further including a panel assembly protecting and enclosing said second block, said panel assembly being located between said base and said cover.

4. The portable computer of claim 2, further comprised of said cable including a U-shaped bent at a point where said cable changes a direction of orientation from said second shaft to said first shaft.

5. The portable computer of claim 2, further comprised of said cable including a first part, a second part, a third part, and a fourth part, said first part and said third part being oriented horizontally relative to said base when said cover is oriented perpendicularly to said base in an open position, and said second part and said fourth part being oriented vertically relative to said base when said cover is oriented perpendicularly to said base in an open position, said cable being arranged to pass along said second shaft and a part of said cable being wound about said second shaft until a bent of said cable reaches said second shaft, said bent being positioned at a point where said cable changes a direction of orientation from said second shaft to said first shaft, said third part of said cable being folded so that said third part of said cable is positioned behind and along said first shaft as viewed from a front direction relative to said base, said fourth part of said cable being rotatively wound in part about said first shaft.

6. The portable computer of claim 4, further comprised of said cable being divided into two separate lines at a middle portion of said cable and then folded to couple said cable to said hinge assembly.

7. The portable computer of claim 5, further comprised of said bent including a U-shaped bent at said point where said cable changes a direction of orientation from said second shaft to said first shaft.

8. The portable computer of claim 5, further comprised of said cable being divided into two separate lines at a middle portion of said cable and then folded to couple said cable to said hinge assembly.